

# Notice of Allowability

Application No.

10/632,666

Examiner

Allen Wong

Applicant(s)

MA ET AL.

Art Unit

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to interview on 9/20/07.
2. ☒ The allowed claim(s) is/are 1,2,4-15,17-30,32 and 33, renumbered as claims 1-30.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All   b) ☐ Some\*   c) ☐ None   of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

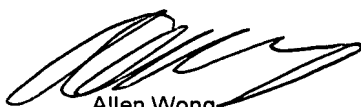
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),  
Paper No./Mail Date 9/20/07.
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

  
Allen Wong  
Primary Examiner  
Art Unit 2621

## **DETAILED ACTION**

### **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Brian Hart on September 20, 2007.

The application has been amended as follows:

Cancel claims 3, 16 and 31.

Claim 1, line 4, "and" has been deleted.

Claim 1, line 9, "measurements." has been changed to --measurements; and wherein converting further comprises determining a change in energy distribution between multiple ones of the video frames via respective motion vector fields (MVF's), the video frames being within a sliding window of the video frame.-- .

Claim 13, line 14, after "measurements;," "and" has been deleted.

Claim 13, line 16, "sequence." has been changed to --wherein converting further comprises: determining that a block is not in a frame boundary associated with frames of the video sequence; and responsive to the determining, placing the block within the frame boundary by decreasing a magnitude of a corresponding motion vector field.-- .

Claim 21, line 1, after "comprising", "a" has been changed to --the--.

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Claim 21, line 2, "computer-program" has been changed to --computer-readable--

Claim 30, line 4, "and" has been deleted.

Claim 30, line 8, after "ER", "measurements." has been changed to --wherein the means for converting further comprises means for determining a change in energy distribution between multiple ones of the video frames via respective motion vector fields (MVFs).--.

***Allowable Subject Matter***

2. Claims 1, 2, 4-15, 17-30 and 32-33 are allowed.

3. The following is an examiner's statement of reasons for allowance: The prior art does not specifically disclose the combination of limitations of claim 1: a method for representing sequential motion patterns, the method comprising: converting video frames into a sequence of energy redistribution measurements; applying one or more motion filters to the ER measurements to generate a number of temporal sequences of motion patterns, the motion patterns being in a spatio-temporal data format, the number being a function of how many motion filters were applied to the ER measurements; and wherein converting further comprises determining a change in energy distribution between multiple ones of the video frames via respective motion vector fields (MVFs), the video frames being within a sliding window of the video frame. Similarly claims 13 and 30 are patentable for similar reasons as claim 1. Independent claim 22 is

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patentable for at least similar reasons as claim 1 since the prior art does not specifically disclose the combination of limitations as stated for claim 22.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen Wong whose telephone number is (571) 272-7341. The examiner can normally be reached on Mondays to Thursdays from 8am-6pm Flextime.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Miller can be reached on (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

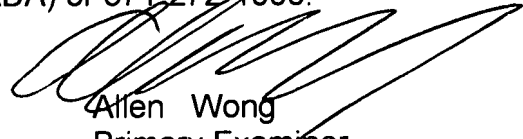
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

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USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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Primary Examiner  
Art Unit 2621

AW  
9/27/07